



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0016

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID A. COLI  
COMMISSIONER

April 10, 2003  
Subject: Livermore  
Project No. NH-1070(900)E, AC-STP-9178(00)X,  
& STP-A120(900)X  
Pin No. 10709.00, 9178.00, & 12090.00  
**Bid Amendment No. 1**

Dear Sir/Ms.:

Please make the following change to your bid package.

Please add the attached Special Provision Section 401 "Hot Mix Asphalt (20mm [ $\frac{3}{4}$  in] Surface Treatment)", 3 pages dated December 12, 2002.

Consider this change prior to submitting your bid on April 16, 2003.

Sincerely,

Bruce R. Carter  
Contracts Engineer



PRINTED ON RECYCLED PAPER

THE MAINE DEPARTMENT OF TRANSPORTATION IS AN AFFIRMATIVE ACTION - EQUAL OPPORTUNITY EMPLOYER

**SPECIAL PROVISION**  
**SECTION 401**  
**HOT MIX ASPHALT**  
 (20mm [¾ in] Surface Treatment)

Description The Contractor shall furnish and place one or more courses of Hot Mix Asphalt (HMA) pavement on an approved base in accordance with the Contract documents and in reasonably close conformity with the lines, grades, thicknesses and typical cross sections shown on the plans or established. The Department shall accept this work under Quality Assurance provisions as specified in Section 401, and Special Provision 106.

The 20 mm [¾ in] HMA Surface Course shall meet all of the Materials, Seasonal Limitations and Construction requirements of Section 401, with the following additions and changes.

**GRADATION REQUIREMENTS**

Sieve Size	Percent Passing
12.5 mm	100
9.5 mm	95-100
4.75 mm	-95
2.36 mm	32-67
1.18 mm	-
0.600 mm	-
0.300 mm	-
0.075 mm	2-10

**VOLUMETRIC DESIGN CRITERIA**

Voids at N <sub>des</sub>	4.0
VMA	15.0 minimum
VFB	65-80
Fines/Eff.Binder	0.6-1.2

The design traffic level for mix placed for this item shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**. Aggregate qualities shall meet the requirements of .3 to <3 million ESAL traffic levels.

A test strip at a nominal depth of 30mm [1¼ in], full lane width, shall be required if the JMF has not been used or approved on a MDOT project in the current calendar year.

On roads open to two way traffic, the test strip shall be placed over the full width of the travel way section, not to exceed 600 meters [2000 ft] in length, or 400 Mg [440 ton] production. Prior to the placement of the test strip a passing verification test is required. A fog coat of Item 409.15, Bituminous

Tack Coat, shall be applied to the level course prior to the placement of the 20mm Surface Treatment Course, payment to be made under the 409.15 pay item.

The test strip **shall not** be excluded from QA analysis, but will be evaluated in accordance with Section 401.03. The Contractor shall notify the Department at least 48 hours in advance of placing the test strip. The test strip is intended to allow the Contractor to establish a method of compaction for the 20mm [ $\frac{3}{4}$  in] surface course areas. Once the methods are established, rolling patterns, equipment, and methods will become part of the QCP. The test strip will also allow for any necessary adjustments to the mix design and or plant mixing procedures, as well as for the Department to evaluate the quality of the pavement.

Mix samples and cores will be obtained from the last two thirds of the test strip. A minimum of three mix samples shall be randomly selected from the last two thirds of the test strip. Five cores shall be randomly sampled from the mat and tested for density verification. Should the resulting core values average less than 92.0% TMD,(average of 5 tests ), the Department will reject the strip. The Contractor will remove and replace rejected strips at their expense. After completion of the test strip, the Contractor shall make any final adjustments to the job mix formula or compaction method. Paving operations shall not resume until the Contractor and the Department determines that material meeting the Contract requirements can be produced, and any changes to the Job Mix Formula have been approved by the Department. The Department shall pay for an accepted test strip as determined Section 401.222 for this item. A new test strip shall be required if a current lot is terminated or completed, and a new lot is started.

The Department may halt the production and placement of the 20mm [ $\frac{3}{4}$  in] HMA Surface Course and require the construction of a new test strip if the Department finds that material being produced, hauled, or placed does not meet the requirements of Sections 401.08 through 401.18.

The Contractor shall sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with the minimum frequencies outlined in Section 401, Table 2: Minimum Quality Control Frequencies.

The Contractor shall monitor plant production using running average of three control charts as specified in Section 106, and Control Limits as specified in Section 401, Table 3: Control Limits.

The Acceptance Criteria shall be as specified in Section 401, Table 4: Acceptance Criteria.

The Acceptance Limit targets will be as specified on the JMF, and the Department will use the appropriate Acceptance Limits table from Section, Table 5: Method A, or Table 7: Method B and C, for the acceptance method noted in the Special Provision 403.

The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

- a) The Pay Factor for VMA, Voids @  $N_d$ , Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.85.

- b) The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Section 703.07 , Table 3, for the design traffic level.
- c) Each of the first 2 control tests for the lot fall outside the upper or lower limits for VMA, Voids @ Nd, or Percent PGAB. This includes any case where both tests are out on the same, or different properties.
- d) The Flat and Elongated Particles value exceeds 10 percent by ASTM D-4791.
- e) There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
- f) The Contractor fails to follow the approved QCP.
- g) The Contractors control chart shows the process to be out of control on any property listed in Section 401, subsection 401.18 , Table 3: Control Limits

Price Adjustment The Department will apply price adjustments for the Hot Mix Asphalt utilized under this Special Provision as outlined in Section 401.222 : Pay Factor for methods A and B; mixes with Volumetric Property requirements.

Dispute Resolution The Contractor may dispute an acceptance test for this item as outlined in Section 401.223 for PGAB, Air Void, and VMA Content only.

Method of Measurement The Department will measure Hot Mix Asphalt pavement by the megagram in accordance with Section 109 - Measurement and Payment.

Basis of Payment The Department will pay for the Work, in place and accepted, in accordance with the applicable sections of the Special Provisions at the contract unit price per megagram(ton).

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
403.210 9.5mm Hot Mix Asphalt Pavement	Megagram (ton)